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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/695,985

10/30/2003

Douglas Chiang

5686

7590

06/26/2006

Mr. Phillip Liu  
6980, Whiteoak Dr.  
Richmond, BC V7E 4Z9  
CANADA

EXAMINER

KNIGHT, DEREK DOUGLAS

ART UNIT

PAPER NUMBER

3681

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/695,985

Applicant(s)

CHIANG, DOUGLAS

Examiner

Derek D. Knight

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claim 5 is objected to because of the following informalities: in line 16 “a head tube” should be changed to --the head tube --. Also in line 16, “inner” should be changed to --outer--. Appropriate correction is required.

### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory

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double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1,3 and 4 of U.S. Patent No. 6,883,818. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both disclose a headset assembly for a bicycle having a bearing set engaged at the top end of a head tube, a positioning ring engaged with an inner periphery of the bearing set, the positioning ring adapted to be mounted on a steering tube, the head tube having a threaded outer periphery and a cap having a threaded inner periphery connected to the head tube, the cap having at least two flat surfaces on it's outer periphery, and the headset assembly having a pressing ring adapted to mount to the steering tube and press on a top surface of the cap. In US 6,883,318, the race is connected to the head tube, effectively making it a part of the head tube, it is obvious that in Application Number 10/695985 the race and the head tube have been combined forming one entity.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagano (US 5,272,936).

Nagano shows in figure 3 a bearing set (161) engaged with an inner periphery of a top end of a head tube (115) and a positioning ring (116,162) engaged with an inner periphery of the bearing set, the positioning ring adapted to be mounted on a steering tube (1), the head tube having a threaded outer periphery, and a cap (123) having a threaded inner periphery which is screwed to the head tube.

Figure 2 shows the cap (23) having a multitude of flat surfaces on its outer periphery.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano (US 5,272,936) in view of Chi (US 5,800,071).

Nagano discloses a headset assembly for a bicycle, as described in the rejection of claims 1 and 2 above, but fails to disclose a pressing ring that is adapted to mount to the steering tube and presses on a top surface of the cap.

Chi shows in figures 1 and 2 a force-exerting element (30) mounted on the steering tube (11) to exert a force on the cap (21).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Naganoto have the pressing ring that attaches to the steering tube also contact the top surface of the cap, in view of Chi, in order to apply pressure to the cap to keep it from backing off, and to ensure the steering tube is sufficiently attached to the head tube.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano (US 5,272,936) in view of Fox et al. (US 391,891).

Nagano discloses a headset assembly for a bicycle, as described in the rejection of claims 1 and 2 above, but fails to disclose the cap having at least two holes defined in the top surface.

Fox et al. shows in figure 4 a nut (D) formed with two holes in its top surface. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Nagano to include holes on the top surface of the cap for the reception of a suitable instrument, in view of Fox et al., by which it may be turned (Fox et al. col. 2, line 48).

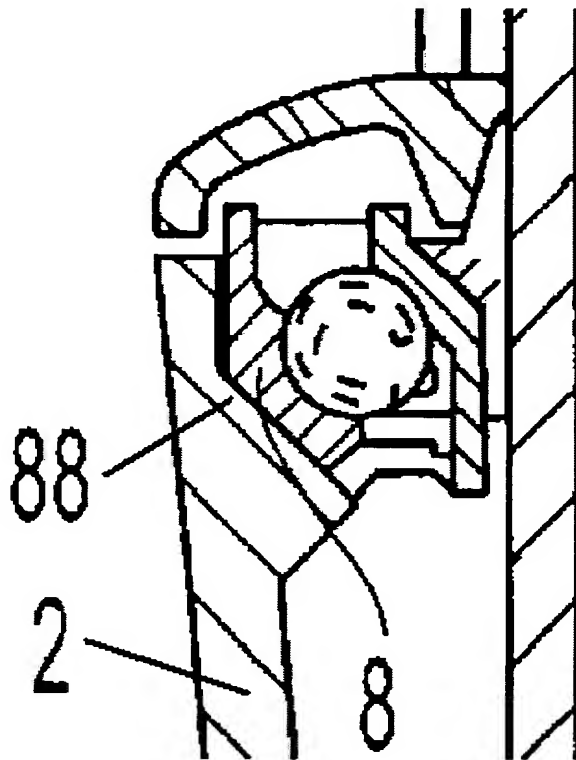
6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano (US 5,272,936) in view of Campagnolo (US 6,431,575).

Nagano discloses a headset assembly for a bicycle, as described in the rejection of claims 1 and 2 above, but fails to disclose the inner periphery of the top end of the

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head tube having a tapered surface which matches with the tapered surface of outer periphery of the bearing set.

As shown below, Campagnolo discloses a head tube (2) wherein the inner periphery of its top end is tapered (88) and the outer periphery of the bearing set (8) is also tapered to match the inner surface of the head tube. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Nagano to include a taper on the inner surface of the head tube, and a matching taper on the outer surface of the bearing set, in view of Campagnolo, to better accommodate any trust loads that would be transmitted through the bearing.



***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 2,233,313 (Hazelroth) December 1939 – discloses a headset wherein a cap having a threaded inner periphery is connected to the threaded outer periphery of a head tube.

***Facsimile Transmission***

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (571) 273-8300. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.



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Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (571) 273-8300) on \_\_\_\_\_ (Date)

Typed or printed name of person signing this certificate:

\_\_\_\_\_  
\_\_\_\_\_

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derek D. Knight whose telephone number is (571) 272-

7951. The examiner can normally be reached on Mon - Thurs & every other Friday,  
9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DDK

*Charles A. Marmor 6/22/06*  
**CHARLES A. MARMOR**  
**SUPERVISORY PATENT EXAMINER**  
**ART UNIT 3681**